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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/076,115	05/12/1998	CHRISTIAN E. GRUBER	0942.4350001	4470

26111 7590 05/08/2002

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EXAMINER

TUNG, JOYCE

ART UNIT	PAPER NUMBER
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1637

DATE MAILED: 05/08/2002

28

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/076,115

Applicant(s)

Gruber et al

FILE

Examiner

Joyce Tung

Art Unit

1637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jan 31, 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 6, 12, 16-20, 22, 25, 28, 29, 31, 32, and 54-56 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 6, 12, 16-20, 22, 25, 28, 29, 31, 32, and 54-56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2b
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____

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Response to Amendment

The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 1637.

1. The amendment filed 1/31/2002 has been entered.
2. Claims 1, 2, 6, 12, 16-20, 22, 25, 28, 29, and 31-32 remain rejected under 35 U.S.C. 102(e) as being anticipated by Burmer (5,726,022).

Burmer discloses that an adaptor with a restriction site is ligated to a first nucleic acid sample and optionally the adaptor may contain a ligand binding end. Further, Burmer discloses that if the first and second nucleic acid fragment are amplified, they are amplified with primers containing a ligand binding end and a sequence complementary to the adaptors (See column 2, lines 39-48). The teachings are inherent that the primer of Burmer contains all the limitation as recited in claims 1, 2, 12, 16-17, 25, 28, 29.

Burmer discloses that amplification may be done by PCR, LCR or TAS (see column 8, lines 47-52) (as recited in claims 12, 16,). This indicates that the polypeptides as listed in claim 6 are involved in the method of the invention, for example, reverse transcriptase and *Taq* DNA polymerase. The isolation step is done by first removing the adaptors by restriction enzyme, capturing the nucleic acid containing the ligand and then the nucleic acid that were not captured is isolated (see column 2, lines 56-59) (as recited in claims 20 and 31-32). The ligand includes

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happen (see column 7, line 4) (as recited in claims 18-19). The solid support is described in column 7, lines 37-48 (as recited in claims 22).

Thus, the teachings of Burner anticipate the limitations of claims 1, 2, 6, 12, 16-20, 22, 25, 28, 29, and 31-32.

Therefore, Applicants's arguments do not obviate the rejection via the amendment because the limitations of claims were not discussed. Applicant's arguments filed 1/31/2002 have been fully considered but they are not persuasive.

The newly added claims 54-56 are also rejected under 35 U.S.C. 102(e) as being anticipated by Burner (5,726,022) since Burner disclose that nucleic acid samples are cDNA derived from RNA (See column 2, lines 34-35).

3. Claims 1, 2, 6, 12, 16, 17-19, 25, 28-29 and 31 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Frohman (PCR protocols, a guide to methods and applications, 1990, pg. 28-38) in view of Lohman et al. (5,631,147).

Regarding the rejection, Applicants argue that there was no motivation to combine the two references to reach the claimed invention. However, the motivation is that the method of Lohman et al. involves using the primer attached to ligand and such that the movement of the amplification of the method of Frohman is tracked (This means that the amplification products are detected). Thus it would have been prima facie obvious to carry out the method as claimed.

Therefore, Applicant's arguments filed 1/31/2002 have been fully considered but they are not persuasive.

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The newly added claims 54-56 are also rejected under 35 U.S.C. 103(a) as being unpatentable over Frohman (PCR protocols, a guide to methods and applications, 1990, pg. 28-38) in view of Lohman et al. (5,631,147) since Frohman disclose that the method involves mRNA (See pg. 28 to pg. 29) and Lohman et al. disclose that the method applies to RNA target (See the Abstract).

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

5. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Joyce Tung whose telephone number is (703) 305-7112. The examiner can normally be reached on Monday-Friday from 8:00 AM-4:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached at (703) 308-1119 on Monday-Friday from 10:00 AM-6:00 PM.

Any inquiries of a general nature or relating to the status of this application should be directed to the Chemical/Matrix receptionist whose telephone number is (703) 308-0196.

6.. Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Art Unit 1656 via the PTO Fax Center located in Crystal Mall 1 using (703) 305-3014 or 308-4242. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989).

Joyce Tung

April 9, 2002



GARY BENZION, PH.D.
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600